Notice of Allowability	Application No.	Applicant(s)
	09/972,136	WEE ET AL.
	Examiner	Art Unit	
	Grigory Gurshman	2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed on 8/02/2005*.

2. ☒ The allowed claim(s) is/are *1-39*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

    Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

EXAMINER'S AMENDMENT

The application has been amended as follows:

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1.   A device for packetizing scalably encoded and progressively encrypted data, said device comprising:

a receiver that receives a stream of <u>media</u> data from an encoding and encrypting device, wherein at least a first portion of said <u>media</u> data is scalably encoded and progressively encrypted <u>into encrypted encoded data, wherein scalably encoding said media data comprises a first encoding of said media data into a first block of data and a second encoding of said media data into a second block of data such that said first block when decoded reconstructs a first version of said media data and said second block when decoded in combination with said first block reconstructs a second version of said media data, wherein progressively encrypting said media data comprises a first encrypting of said first block to generate a first encrypted encoded block and a second encrypting of said second block in combination with a block selected from the group consisting of said first block and said first encrypted encoded block to generate a second encrypted encoded block,</u> wherein ~~scalably encoded and progressively encrypted data comprises a first block of data that~~ <u>said first encrypted encoded block</u> when decoded and decrypted reconstructs <u>said</u> ~~a~~ first version of <u>said media</u> ~~original~~ data and ~~a second block of data that~~ <u>said second encrypted encoded block</u> when decoded and decrypted in combination with said first <u>encrypted encoded</u> block reconstructs <u>said</u> ~~a~~ second version of said <u>media</u> ~~original~~ data [[,]] ~~wherein said first~~

~~block is independently encrypted and said second block is encrypted based on said first
block~~; and

a packetizer coupled to said receiver that packetizes at least a second portion of
said <u>encrypted encoded</u> data into secure and scalable data packets.

2.   The device of Claim 1 wherein said device is adapted to receive said
<u>encrypted encoded</u> data in real time as said <u>encrypted encoded</u> data are output from
said encoding and encrypting device.

3.   The device of Claim 1 wherein said device is adapted to receive said
<u>encrypted encoded</u> data from a storage unit of said encoding and encrypting device.

4.   The device of Claim 1 wherein said <u>media</u> data are selected from the
group consisting of: video data, audio data, image data, graphic data, and web page
data.

5.   The device of Claim 1 wherein said <u>encrypted encoded</u> data comprise
header data and payload data, wherein said header data provide information
corresponding to said payload data, wherein said information allows a transcoder to
transcode said secure and scalable data packets without decrypting and decoding said
secure and scalable data packets.

8.   The device of Claim 1 comprising:

a storage unit coupled to said receiver, said storage unit for storing said encrypted encoded data prior to packetization of said encrypted encoded data by said packetizer.

9.   The device of Claim 1 comprising:

a storage unit coupled to said packetizer, said storage unit for storing said encrypted encoded data subsequent to packetization of said encrypted encoded data by said packetizer.

12.   The device of Claim 1 wherein said encrypted encoded data received from said encoding and encrypting device comprise a subset of a larger set of data, wherein said subset is selected according to attributes downstream of said device.

13.   The device of Claim 1 wherein said packetizer packetizes a subset of said encrypted encoded data, wherein said subset is selected according to attributes downstream of said device.

14.   A method for packetizing scalably encoded and progressively encrypted data, said method comprising:

a) receiving a stream of media data from an encoding and encrypting device, wherein at least a first portion of said media data is scalably encoded and progressively encrypted into encrypted encoded data, wherein scalably encoding said media data comprises a first encoding of said media data into a first block of data and a second encoding of said media data into a second block of data such that said first block when

decoded reconstructs a first version of said media data and said second block when

decoded in combination with said first block reconstructs a second version of said

media data, wherein progressively encrypting said media data comprises a first

encrypting of said first block to generate a first encrypted encoded block and a second

encrypting of said second block in combination with a block selected from the group

consisting of said first block and said first encrypted encoded block to generate a

second encrypted encoded block, wherein ~~scalably encoded and progressively~~

~~encrypted data comprises a first block of data that~~ said first encrypted encoded block

when decoded and decrypted reconstructs said ~~a~~ first version of said media ~~original~~

data and said second encrypted encoded block ~~a second block of data that~~ when

decoded and decrypted in combination with said first encrypted encoded block

reconstructs said ~~a~~ second version of said media ~~original~~ data [[,]] ~~wherein said first~~

~~block is independently encrypted and said second block is encrypted based on said first~~

~~block~~; and

b) packetizing at least a second portion of said encrypted encoded data into

secure and scalable data packets.

15.   The method of Claim 14 wherein said encrypted encoded data are

received in real time as said encrypted encoded data are output from said encoding and

encrypting device.

16.   The method of Claim 14 wherein said encrypted encoded data are

received from a storage unit of said encoding and encrypting device.

17.   The method of Claim 14 wherein said <u>media</u> data are selected from the group consisting of: video data, audio data, image data, graphic data, and web page data.

18.   The method of Claim 14 wherein said <u>encrypted encoded</u> data comprise header data and payload data, wherein said header data provide information corresponding to said payload data, wherein said information allows a transcoder to transcode said secure and scalable data packets without decrypting and decoding said secure and scalable data packets.

21.   The method of Claim 14 comprising:
storing said <u>encrypted encoded</u> data prior to said step of packetizing.

22.   The method of Claim 14 comprising:
storing said <u>encrypted encoded</u> data subsequent to said step of packetizing.

25.   The method of Claim 14 wherein said <u>encrypted encoded</u> data received from said encoding and encrypting device comprise a subset of a larger set of data, wherein said subset is selected according to downstream attributes.

26.   The method of Claim 14 wherein said step b) comprises:
selecting a subset of said <u>encrypted encoded</u> data according to downstream attributes; and
packetizing said subset.

27.   A computer readable medium having computer readable code stored

thereon for causing a device to perform a method for packetizing scalably encoded and

progressively encrypted data, said method comprising:

a) receiving a stream of <u>media</u> data from an encoding and encrypting device,

wherein at least a first portion of said <u>media</u> data is scalably encoded and progressively

encrypted <u>into encrypted encoded data, wherein scalably encoding said media data</u>

<u>comprises a first encoding of said media data into a first block of data and a second</u>

<u>encoding of said media data into a second block of data such that said first block when</u>

<u>decoded reconstructs a first version of said media data and said second block when</u>

<u>decoded in combination with said first block reconstructs a second version of said</u>

<u>media data, wherein progressively encrypting said media data comprises a first</u>

<u>encrypting of said first block to generate a first encrypted encoded block and a second</u>

<u>encrypting of said second block in combination with a block selected from the group</u>

<u>consisting of said first block and said first encrypted encoded block to generate a</u>

<u>second encrypted encoded block,</u> wherein ~~scalably encoded and progressively~~

~~encrypted data comprises a first block of data that~~ <u>said first encrypted encoded block</u>

when decoded and decrypted reconstructs <u>said</u> a first version of <u>said media</u> ~~original~~

data and <u>said second encrypted encoded block</u> ~~a second block of data that~~ when

decoded and decrypted in combination with said first <u>encrypted encoded</u> block

reconstructs <u>said</u> a second version of said <u>media</u> ~~original~~ data [[,]] ~~wherein said first~~

~~block is independently encrypted and said second block is encrypted based on said first~~

~~block~~; and

b) packetizing at least a second portion of said <u>encrypted encoded</u> data into

secure and scalable data packets.

28.   The computer readable medium of Claim 27 wherein said encrypted encoded data are received in real time as said encrypted encoded data are output from said encoding and encrypting device.

29.   The computer readable medium of Claim 27 wherein said encrypted encoded data are received from a storage unit of said encoding and encrypting device.

30.   The computer readable medium of Claim 27 wherein said media data are selected from the group consisting of: video data, audio data, image data, graphic data, and web page data.

31.   The computer readable medium of Claim 27 wherein said encrypted encoded data comprise header data and payload data, wherein said header data provide information corresponding to said payload data, wherein said information allows a transcoder to transcode said secure and scalable data packets without decrypting and decoding said secure and scalable data packets.

34.   The computer readable medium of Claim 27 wherein said method comprises:

storing said encrypted encoded data prior to said step b) of said method.

35.   The computer readable medium of Claim 27 wherein said method comprises:

storing said encrypted encoded data subsequent to said step b) of said method.

38.   The computer readable medium of Claim 27 wherein said <u>encrypted</u>
<u>encoded</u> data received from said encoding and encrypting device comprise a subset of
a larger set of data, wherein said subset is selected according to downstream attributes.

39.   The computer readable medium of Claim 27 wherein said step b) of said
method comprises:

selecting a subset of said <u>encrypted encoded</u> data according to downstream
attributes; and

packetizing said subset.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

1.   Claim Rejections under 35 USC § 112 second paragraph have been overcome by
the amendment.

2.   Referring to claims 1-4, 8-17, 20-30, 34-38, Yang discloses a statistical multiplexer
for live and pre-compressed video (see abstract and Fig. 4). Yang teaches that a video
signal is provided to a conventional quantizer 64 which compresses the video signal by
reducing a number of data bits from the transform coefficients based upon the
magnitude of a quantizing factor, referred to generally as a compression factor,
provided to the quantizer 64 via the line 56 from the controller 42. The video signal is
then encoded by an encoder 68 in a conventional manner, and if necessary or desired,

the video signal may be encrypted by an encrypter 70. The video signal is then

converted into data packets suitable for broadcast transmission by a packetizer 72 (see

column 3, lines 52-62 and Fig. 3).

However, referring to the independent claims 1, 14 and 27, Yang does not teach or

suggest *media data is scalably encoded and progressively encrypted into encrypted*

encoded data, wherein scalably encoding said media data comprises a first encoding of

said media data into a first block of data and a second encoding of said media data into

a second block of data such that said first block when decoded reconstructs a first

version of said media data and said second block when decoded in combination with

said first block reconstructs a second version of said media data, wherein progressively

encrypting said media data comprises a first encrypting of said first block to generate a

first encrypted encoded block and a second encrypting of said second block in

combination with a block selected from the group consisting of said first block and said

first encrypted encoded block to generate a second encrypted encoded block.

3.   Referring to claims 5, 6, 7, 18, 19, 31, 32, 33, Yang discloses a statistical

multiplexer for live and pre-compressed video (see abstract and Fig. 4). Yang, however

does not teach streaming data comprising header data and payload data allowing the

transcoder to transcode the data packets.

Referring to the instant claims, Jessup discloses a method forming an audio/video

(see abstract). Jessup teaches a method and apparatus for generating an interactive

component data stream, representing an application program, for an audio video

interactive (AVI) composite signal (see abstract and Fig 1). Jessup shows that the

header data is packetized into a single packet of a special type called a header or
auxiliary packet. Second, module data from the record of the module file 112 pointed to
by the module pointer is retrieved from the module file 112, and supplied to the
transport packetizer 20 (see Fig. 1, Fig. 5, 112).

However, neither Yang nor Jessup teach or suggest encrypting, *wherein
progressively encrypting the media data comprises a first encrypting of said first block to
generate a first encrypted encoded block and a second encrypting of said second block
in combination with a block selected from the group consisting of said first block and
said first encrypted encoded block to generate a second encrypted encoded block.*

Therefore, the combination of Yang and Jessup does not render the instant claims
obvious.

4.   In view of the reasons presented herein claims 1-39 are in condition for allowance.

Any comments considered necessary by applicant must be submitted no later
than the payment of the issue fee and, to avoid processing delays, should preferably
accompany the issue fee. Such submissions should be clearly labeled "Comments on
Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grigory Gurshman whose telephone number is (571)272-3803. The examiner can normally be reached on 9 AM-5:30 PM.
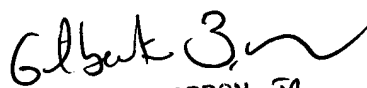
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571)272-3799. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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